

Claims

1. Process for preparing of maltitol enriched products, and said process is comprising the successive steps:
 - a) Obtaining syrup (A) containing at least 75%, preferably more than 80% of maltose based on dry substance,
 - b) Fractionating chromatographically, the process conditions of said fractionation are selected in order to obtain a fraction (B) rich in maltose, comprising at least 92% maltose based on dry substance of fraction (B),
 - c) Hydrogenating catalytically fraction (B) for obtaining a liquid maltitol enriched product (C),
 - d) Increasing dry substance of liquid maltitol enriched product (C),
 - e) Optionally solidifying or crystallizing.
2. A process according to claim 1 characterised in that syrup (A) is obtained by liquefying starch milk to a dextrose equivalent of from 2 to 25 for obtaining liquefied starch milk and subjecting said liquefied starch milk to a saccharification step in presence of β -amylase and at least one debranching enzyme selected from the group consisting of pullulanases, iso-amylases and mixtures thereof, and optionally followed by addition of α -amylase for obtaining a syrup (A) containing at least 81% of maltose based on dry substance.
3. A process according to claim 1 or 2 characterised in that fraction (B) is comprising at least 93% maltose based on dry substance.
4. A process according to anyone of claims 1 to 3 characterised in that product (C) is comprising at least 90% maltitol.

5. Process according to anyone of claim 1 to 3 characterised in that step d) of said process is followed by the further successive steps:
- e) Crystallizing product (C) by one or multiple crystallization steps for obtaining crystalline maltitol intermediate (D) and liquid maltitol co-product (E), wherein intermediate (D) has a dry substance of at least 93% and comprising at least 97% maltitol based on dry substance, and
 - f) Drying crystalline maltitol intermediate (D) for obtaining crystalline maltitol product (F) of at least 98.5% dry substance and comprising at least 97% maltitol based on dry substance,
6. A process according to claim 5 characterized in that step f) of said process is followed by fractionating chromatographically the liquid maltitol co-product (E), the process conditions of said fractionation are selected in order to obtain a fraction (G) rich in maltitol, comprising at least 90% maltitol based on dry substance.
7. A process according to claim 5 or 6 characterized in that crystalline maltitol intermediate (D), co-product (E), and/or fraction (G) and optionally water are mixed for obtaining liquid maltitol product (H) containing at least 94% maltitol based on dry substance and having at least 50% dry substance.
8. A process according to anyone of claim 5 to 7 characterized in that crystalline maltitol (F) is having a purity of at least 98%, preferably more than 99% purity, more preferably more than 99.5%.